

## DR(V)-Z Medium Pressure Screw Air Compressor

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Specifications are subject to change without notice due to improvement in performance. Anything needed please contact us.

Stability | Energy Saving | Efficiency | Silence

Energy Saving Enhances Value, Ingenuity Creates the Future!

# Dream Compressor

Create the first brand of energy- saving silent air compressor



*Stability  
Engery Saving*



## About Us

For more than a decade, Dream ( Shanghai) Compressor Co., Ltd has been striving to become one of the leading manufacturers of compressed air solutions in China.

The dream is located in Xingta industrial zone, Shanghai Jinshan district with 25,000 square meter factory coverage, is specialized in designing, manufacturing and sales of air compressors and air treat-ment systems with an annual capacity of 10, 000 units. Through years of efforts, its products have won wide recognition and acclaim from the domestic and oversea markets for high performance and reliability, durability and customer care.

The company fully complies with international standards in its production and management and has acquired ( Quality Assurance) certificates of ISO9001, CE Certificate for European Market, UL & ASME

certificate for United States market and Class O certificate from TUV for our oil-free screw compressors.as well as a variety of other certificates in terms of environmental protection, safety, and electrical engineering.

- Our product lines covering the following areas:
- Oil-injected rotary screw compressors (Fixed speed and variable speed; high, normal and low pres-sure)
- Portable screw air compressors (Diesel-powered and electric motor powered)
- Oil-free air compressors ( dry type, water-lubricated type)
- High-pressure piston air compressors (Oil-injected and oil-free)
- Air treatment equipment (Air dryers, air filters and air storage tank)

## Certificates



Dream Compressor has always been a leader in the field of compressor technology, and its products include fixed screw air compressors, mobile screw compressors, piston air compressors, air dryers, precision filters, etc., which are widely used in various industries , Dream oil-free full range of products have gained the German Rhine class 0 certification. Dream company has become the premier supplier of screw compressors and piston machines with its rich experience and continuous innovation technology. After efforts, Dream has been successfully accepted by the mainland market with a good reputation.



Covering 17 product series, 500+ products for customers to select, one-stop air compressor solution provider for various industries.

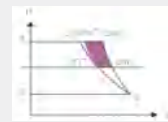




# DR(V)-Z Medium Pressure Screw Air Compressor

## 01 Advanced medium pressure two-stage main air end

1. Two-stage compression integrated design, the use of oil mist spray cooling between stages reduces the temperature of the air, and the compression process approaches the most energy-saving isothermal compression. In principle, the two-stage compression saves 5%–8% energy than the single compression ;
2. It is suitable for the matching of the compression ratio of the medium pressure, the leakage in the host is small, and the volumetric efficiency is high ;
3. The bearing adopts imported heavy-duty bearings to make the rotor more powerful; the two-stage rotors are driven by helical gears, so that each rotor has the best linear speed ;
4. The third-generation asymmetric rotor technology, the tooth surface is processed by the German KAPP rotor grinder, creating a high-precision rotor, which is the first guarantee of the air end efficiency and stability.



The air filter takes in the air independently and directly inhales the ambient cold air, which is not affected by the temperature inside the canopy, thus achieving better energy efficiency.

## 02 High-efficiency permanent magnet synchronous motor

1. IP54 protection level, more stable and reliable than IP23 in harsh environments ;
2. Low temperature rise design, higher efficiency, extending the service life of the motor ;
3. Use ceramic-plated bearings to completely eliminate the impact of shaft current on the bearings ;
4. It is made of rare-earth permanent magnet materials, with large torque during starting and running, and small current during starting and running ;
5. Reasonable magnetic field design, magnetic density distribution, energy-saving motor has a wider working frequency range and low operating noise ;
6. Cooperate with the operation of the frequency converter to realize the frequency conversion soft start, avoid the strong mechanical impact of the machine and equipment when the motor is started at full voltage, which is beneficial to protect the mechanical equipment, reduce equipment maintenance, and improve the reliability of the equipment.



## 03 Special valve group

1. Intake valve: It adopts a special medium-pressure normally-closed butterfly valve, which has a non-return function, stable operation, high accuracy of air volume control, noise reduction design, low cavitation noise, and long service life ;
2. Minimum pressure maintenance valve: special valve for medium pressure, high pressure resistance, high temperature resistance, accurate opening pressure, ensuring stable pressure in the barrel, ultra-fast seat return, strong sealing, ensuring no backflow of air, low pressure loss, and high efficiency ;
3. Temperature control valve: The unit is equipped with a mixed-flow temperature control valve to ensure that the unit is more convenient to start in a low temperature environment, and the oil supply of the unit is guaranteed at all times; the unit is in the best performance state by controlling the oil supply temperature of the host ;
4. Oil shut-off valve: a special normally closed valve for medium pressure, controlled by the head exhaust pressure. When starting, the valve opens quickly to ensure that the compressor is lubricated and warmed up as soon as possible; when stopping, the valve can prevent oil from spraying from the intake end.



Canopy is noise reduction design, according to the noise theory calculation, internal with a special flame retardant silencing cotton, reduce the unit noise, to provide a quieter environment.

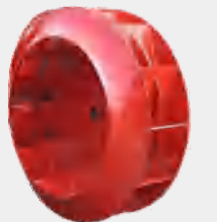
## 04 Advanced and reliable electronic control system

1. The large-size color LCD touch screen has a good human-machine communication interface, and the touch screen has functions of preventing accidental touch and sleep ;
2. Adopt double frequency conversion system, more energy saving, perfect match of frequency converter and motor, low frequency and large torque, can output 180% rated torque ;
3. In view of the characteristics of medium voltage, a special program is developed, with multiple pressure sensors and multiple temperature sensors, which can comprehensively detect the operating status of the unit, and automatically control the machine status without special supervision ;
4. Configure the Internet of Things, you can view the unit operating status on your mobile phone ;
5. Independent air duct design, suitable for various working conditions.



## 05 Silent centrifugal fan

1. Adopt centrifugal fan, brand-new separated radial cooling fan design, with special cooler, cooling effect is better and more energy saving ;
2. Compared with axial fans, centrifugal fans have higher wind pressure and lower noise ;
3. Using frequency conversion fan control, the oil temperature is constant, and the service life of the lubricant is prolonged ;
4. Due to the high wind pressure, the cooler and filter are less likely to be blocked.



## 06 High-quality three filters

1. The filtration area of the air filter exceeds 150% of the normal requirement, with low intake pressure loss and good energy efficiency ;
2. The oil filter adopts a full-flow built-in pressure-bearing oil filter suitable for medium pressure conditions. The oil filter's rated processing capacity is  $\geq 1.5$  times the circulating oil capacity. Imported filter materials and large margin design are selected, with high filtering accuracy and good durability ;
3. The oil is divided into special customized oil, which is designed and developed for medium pressure working conditions. It has a wide applicable pressure range, good separation effect and low operating pressure loss; imported glass fiber material is selected ;
4. The layout design of the three filter is reasonable, the maintenance is convenient, and the downtime is reduced.



## 07 High-quality and efficient coupling

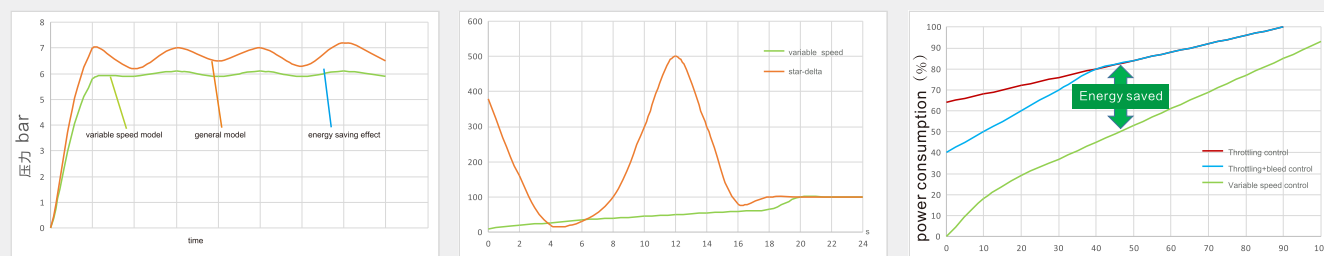
1. The coupling is a torsion elastic coupling with a failure protection function, which can effectively prevent and reduce the vibration and impact generated during operation ;
2. The elastic body is only subjected to pressure and can withstand greater loads. The drum-shaped teeth of the elastic body can avoid stress concentration.





## Overall energy saving

Compared with power fixed speed air compressor, variable speed air compressor has practical significance in energy saving.



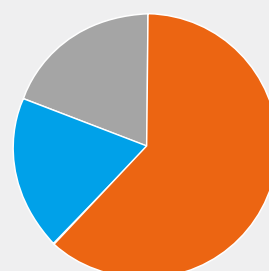
1.The pressure control of variable speed air compressor is precise. It can quickly respond to pressure changes, adjust the speed of the permanent magnet motor, control the pressure fluctuation range within  $\pm 0.1\text{bar}$ , stabilize the pressure of the pipe network, provide the necessary air volume with the most reasonable power, and reduce excess energy loss.

2.Variable speed air compressor adopts the method of frequency conversion start up, eliminating the peak current of star-delta start up and starting smoothly. Reduce the starting power, reduce the impact on the power grid and equipment, and can reduce the equipment operation noise.

3.Variable speed control is more excellent than ordinary throttle control. The adjustment range of the flow rate is larger, and with the high-efficiency permanent magnet motor, the energy saving effect is more significant at a low percentage flow rate.

4. Most of the cost in the life cycle of the air compressor is generated by the electricity it consumes. The power consumption of the compressor is closely related to the on-site air planning. The variable speed air compressor can not only ensure smooth production, but also save considerable electricity costs and achieve a win-win situation for the enterprise.

Cost of regular air compressor



Energy consumption Maintenance cost Purchase cost

Cost of variable speed air compressor



Energy consumption Maintenance cost Purchase cost Energy saved

## Product application scenarios



Mining equipment: used for high-pressure blasting mining, driving various pneumatic machinery.

Packing machine: The air compressor is used for the pneumatic packing machine. After the air is compressed, the piston of the cylinder is pressed down, and the vibrator is driven to move quickly, so that the overlapping part of the packing belt produces a hot melt effect.

## Cases



An oil field borders the Bohai Sea in the east, the Jizhong Plain in the west, Shandong in the southeast, and the junction of Tianjin and Tang in the north, across 25 districts, cities and counties in the three provinces and cities of Tianjin, Hebei and Shandong. Exploration and development construction began in January 1964, with a total exploration and development area of 18,716 square kilometers. The oilfield headquarters is located in the national "Eleventh Five-Year" key development and opening construction area-Tianjin Binhai New District, 190 kilometers away from Beijing, 40 kilometers away from Tianjin New Port, and 70 kilometers away from Tianjin International Airport. The geographical position is superior, the sea, land and air transportation are developed, and the communication is convenient. It is an important part of the Bohai Rim Economic Circle. The purchase of DR-45Z from Dream Company is mainly used for pipe purge gas supply.



## Customer Service And Support

▲ As an air compressor manufacturer, we are steadily moving towards service providers and creating value for customers, make our customers successful.

● Ensure the safe and stable operation of customer equipment and solve user's problems promptly. ● Training customer operation personnel and service personnel. ● Feedback information. ● Track corrective actions. ● Aircompressor Failure Report and Repair Process.

Response Time: We promise to get back to you within 24 hours.

Service Hotline: whatsapp/skype/wechat:+86 13482161490.



## Intelligent Control Technology-smart Cloud Technology

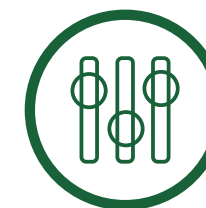
### Three major functions and values of cloud intelligent control



#### Digital Station

Intelligent control: Reduce operation and maintenance costs by 10-30%

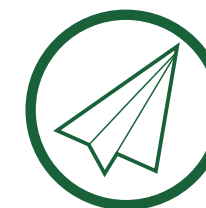
- 3D virtual air compressor station
- Dynamic data monitoring
- Workshop diagnosis report
- Online fault warning
- Maintenance cycle reminder



#### Intelligent control

Intelligent tuning: reduce labor hours by 250%

- Automatic control of air compressor
- AI algorithm autonomous tuning
- Device priority dynamic decision
- Intelligent control of auxiliary equipment



#### Energy saving of the whole station

Energy saving of the whole station: save 5-30% of power consumption in the workshop

- Edge computing technology
- Narrowband constant pressure technology
- Multi-parameter and multi-constraint control algorithm
- Big data visualization technology

### Digital station value

Total station monitoring and control (computer side)

1. Air compressor, refrigerated air dryer, adsorption air dryer, water pump, fan, waste heat recovery machine, flow meter, electric meter, etc.



Specifications

Medium Pressure Direct-Drive Fix Speed Screw Compressor

DR-Z系列 中压直联螺杆压缩机	排气压力 Working pressure		排气量 Capacity		功率 Power		噪音 NOise	空气出口管径 Air outlet pipe diameter	机组净重 Net weight	外形尺寸 (mm) Dimensions(mm)		
	bar	psig	(m3/min)	cfm	kW	hp				长 Length	宽 Width	高 Height
DR-18Z	20	291	1.7	61	18	25	65±3	G3/4"	868	1600	1100	1150
	25	364	1.7	61	18	25	65±3	G3/4"	868	1600	1100	1150
	30	437	1.7	61	18	25	65±3	G3/4"	868	1600	1100	1150
DR-22Z	20	291	2.1	74	22	30	65±3	G3/4"	900	1600	1100	1150
	25	364	2.1	74	22	30	65±3	G3/4"	900	1600	1100	1150
	30	437	2.1	74	22	30	65±3	G3/4"	900	1600	1100	1150
	35	510	1.6	57	22	30	65±3	G3/4"	900	1600	1100	1150
	40	583	1.6	57	22	30	65±3	G3/4"	900	1600	1100	1150
DR-37Z	20	291	3.3	117	37	50	65±3	G3/4"	1340	1800	1350	1500
	25	364	3.3	117	37	50	65±3	G3/4"	1340	1800	1350	1500
	30	437	3.3	117	37	50	65±3	G3/4"	1340	1800	1350	1500
	35	510	3.0	106	37	50	65±3	G3/4"	1340	1800	1350	1500
	40	583	3.0	106	37	50	65±3	G3/4"	1340	1800	1350	1500
DR-55Z	20	291	6.4	225	55	75	67±3	DN32	2100	2400	1580	1700
	25	364	5.0	176	55	75	67±3	DN32	2100	2400	1580	1700
	30	437	4.7	165	55	75	67±3	DN32	2100	2400	1580	1700
	35	510	4.3	151	55	75	67±3	DN32	2100	2400	1580	1700
	40	583	3.8	133	55	75	67±3	DN32	2100	2400	1580	1700
DR-75Z	20	291	7.2	255	75	100	68±3	DN32	2300	2400	1580	1700
	25	364	7.0	248	75	100	68±3	DN32	2300	2400	1580	1700
	30	437	6.7	237	75	100	68±3	DN32	2300	2400	1580	1700
	35	510	6.3	223	75	100	68±3	DN32	2300	2400	1580	1700
	40	583	5.7	201	75	100	68±3	DN32	2300	2400	1580	1700
DR-90Z	20	291	12.0	423	90	120	70±3	DN32	2800	2400	1580	1700
	25	364	10.3	364	90	120	70±3	DN32	2800	2400	1580	1700
	30	437	10.0	353	90	120	70±3	DN32	2800	2400	1580	1700
	35	510	6.3	223	90	120	70±3	DN32	2800	2400	1580	1700
DR-110Z	20	291	13.7	483	110	150	72±3	DN40	3000	2700	1680	1900
	25	364	12.5	440	110	150	72±3	DN40	3000	2700	1680	1900
	30	437	10.3	363	110	150	72±3	DN40	3000	2700	1680	1900
	35	510	9.6	339	110	150	72±3	DN40	3000	2700	1680	1900
	40	583	9.1	321	110	150	72±3	DN40	3000	2700	1680	1900
DR-132Z	20	291	16.3	576	132	175	74±3	DN50	3200	2700	1680	1900
	25	364	13.5	476	132	175	74±3	DN50	3200	2700	1680	1900
	30	437	12.2	430	132	175	74±3	DN50	3200	2700	1680	1900
	35	510	11.8	416	132	175	74±3	DN50	3200	2700	1680	1900
	40	583	11.3	398	132	175	74±3	DN50	3200	2700	1680	1900
DR-160Z	20	291	20.0	706	160	215	75±3	DN50	3600	3000	1830	2000
	25	364	16.1	567	160	215	75±3	DN50	3600	3000	1830	2000
DR-185Z	20	291	23.5	829	185	250	76±3	DN50	3800	3000	1830	2000
	25	364	18.5	652	185	250	76±3	DN50	3800	3000	1830	2000
DR-200Z	20	291	26.0	918	200	270	76±3	DN50	4800	3000	1830	2000
	25	364	22.9	809	200	270	76±3	DN50	4800	3000	1830	2000
	30	437	22.2	783	200	270	76±3	DN50	4800	3000	1830	2000
DR-200ZW	20	291	30.2	1067	220	300	78±3	DN65	5000	3300	1930	2250
	25	364	25.8	911	220	300	78±3	DN65	5000	3300	1930	2250
	30	437	23.2	819	220	300	78±3	DN65	5000	3300	1930	2250
	35	510	22.0	776	220	300	78±3	DN65	5000	3300	1930	2250
DR-250ZW	20	291	34.2	1207	250	350	78±3	DN65	5500	3300	1930	2250
	25	364	29.1	1026	250	350	78±3	DN65	5500	3300	1930	2250
	30	437	27.5	972	250	350	78±3	DN65	5500	3300	1930	2250
	35	510	25.2	888	250	350	78±3	DN65	5500	3300	1930	2250
	40	583	22.8	804	250	350	78±3	DN65	5500	3300	1930	2250
DR-280ZW	20	291	37.7	1330	280	375	80±3	DN65	5800	3300	1930	2250
	25	364	34.0	1200	280	375	80±3	DN65	5800	3300	1930	2250
	30	437	30.0	1060	280	375	80±3	DN65	5800	3300	1930	2250
	35	510	27.3	965	280	375	80±3	DN65	5800	3300	1930	2250
DR-315ZW	20	291	45.0	1590	315	422	80±3	DN65	6400	3500	2200	2300
	25	364	37.7	1330	315	422	80±3	DN65	6400	3500	2200	2300
	30	437	33.7	1189	315	422	80±3	DN65	6400	3500	2200	2300
	35	510	29.8	1053	315	422	80±3	DN65	6400	3500	2200	2300
DR-315ZW	40	583	27.1	958	315	422	80±3	DN65	6400	3500	2200	2300
	40	583	27.1	958	315	422	80±3	DN65	6400	3500	2200	2300

Dream Compressor Specifications follow the principle of the followings:

- 1.The value of the capacity is the air volume flow under the following conditions (temperature: 32℃, atmospheric pressure: 101.325KPa).
- 2.The exhaust pressure is the value after the check valve.
- 3.The noise value is the value in the room without echo, the test tolerance: 3dB(A).

Specifications

Medium Pressure Permanent Magnet Variable Speed Screw Compressor

DR(V)-Z系列 永磁变频螺杆式压缩机	排气压力 Working pressure		排气量 Capacity		功率 Power		噪音 NOise	空气出口管径 Air outlet pipe diameter	机组净重 Net weight	外形尺寸 (mm) Dimensions(mm)		
	bar	psig	(m3/min)	cfm	kW	hp				长 Length	宽 Width	高 Height
DRV-55Z	20	291	3.8-6.4	134-226	55	75	67±3	DN32	2200	2400	1580	1700
	25	364	3.6-6.0	127-212	55	75	67±3	DN32	2200	2400	1580	1700
	30	437	3.1-5.2	109-184	55	75	67±3	DN32	2200	2400	1580	1700
	35	510	2.6-4.3	92-152	55	75	67±3	DN32	2200	2400	1580	1700
	40	583	2.3-3.8	81-134	55	75	67±3	DN32	2200	2400	1580	1700
DRV-75Z	20	291	4.6-7.7	162-272	75	100	68±3	DN32	2400	2400	1580	1700
	25	364	4.5-7.5	159-265	75	100	68±3	DN32	2400	2400	1580	1700
	30	437	4.0-6.7	141-237	75	100	68±3	DN32	2400	2400	1580	1700
	35	510	3.8-6.3	134-222	75	100	68±3	DN32	2400	2400	1580	1700
DR-90Z	20	291	6.7-11.2	237-396	90	120	70±3	DN32	2800	2400	1580	1700
	25	364	6.2-10.3	219-364	90	120	70±3	DN32	2800	2400	1580	1700
	30	437	6.0-10.0	212-353	90	120	70±3	DN32	2800	2400	1580	1700
	35	510	4.1-6.8	145-240	90	120	70±3	DN32	2800	2400	1580	1700
DRV-110Z	20	291	8.2-13.6	290-480	110	150	72±3	DN40	3100	2700	1680	1900
	25	364	7.5-12.5	265-441	110	150	72±3	DN40	3100	2700	1680	1900
	30	437	6.5-10.8	230-381	110	150	72±3	DN40	3100	2700	1680	1900
	35	510	5.8-9.6	205-339	110	150	72±3	DN40	3100	2700	1680	1900
DRV-132Z	20	291	10.1-16.8	357-593	132	175	74±3	DN40	3300	2700	1680	1900
	25	364	9.0-15.0	318-530	132	175	74±3	DN40	3300	2700	1680	1900
	30	437	7.9-13.1	279-463	132	175	74±3	DN40	3300	2700	1680	1900
	35	510	7.1-11.8	251-417	132	175	74±3	DN40	3300	2700	1680	1900
DRV-160Z	20	291	13.7-22.9	483-809	160	215	75±3	DN50	3800	3000	1830	2000
	25	364	12.5-21.2	440-748	160	215	75±3	DN50	3800	3000	1830	2000
	30	437	10.3-18.5	363-652	160	215	75±3	DN50	3800	3000	1830	2000
	35	510	9.6-16.1	339-567	160	215	75±3	DN50	3800	3000	1830	2000
DRV-185Z	20	291	16.3-27.1	576-958	185	250	76±3	DN50	4000	3000	1830	2000
	25	364	14.5-23.5	511-829	185	250	76±3	DN50	4000	3000	1830	2000
	30	437	12.2-20.0	430-706	185	250	76±3	DN50	4000	3000	1830	2000
	35	510	11.3-17.6	398-621	185	250	76±3	DN50	4000	3000	1830	2000
DRV-200Z	20	291	20.0-33.7	706-1189	200	270	76±3	DN50	4800	3000	1830	2000
	25	364	18.5-30.2	652-1067	200	270	76±3	DN50	4800	3000	1830	2000
	30	437	16.1-26.0	567-918	200	270	76±3	DN50	4800	3000	1830	2000</